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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,059	09/18/2003	John E. Rogers	J. Rogers	5491
7590	02/09/2006			
David G. Henry 900 Washington Avenue P.O. Box 1470 Waco, TX 76703-1470				
			EXAMINER CONLEY, FREDRICK C	
			ART UNIT 3673	PAPER NUMBER

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/665,059

Applicant(s)

ROGERS, JOHN E.

Examiner

FREDRICK C. CONLEY

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 13,17,20 and 22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,14-16 and 19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12,18,21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 18, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,675,855 to Culp.

Claim 12, Culp discloses a device comprising;  
a foam mattress (10) cushion containing a plurality of vacant regions defined by the conical structures 40 extending from the top and bottom surfaces of the mattress and the vacant conical structures inherently reduce the local stresses on the supported body since the mattress does not come into contact with the body,  
a bladder (14,16) semi-permeable to or other fluids, completely encasing said mattress via a passageway 20 to allow and control the ingress and egress of a gas into the pores within the materials encased by the bladder.

Claim 18, Culp discloses a method for reducing the possibility of development of deleterious body lesions in a human body under conditions of continued bed confinement by:

placing a mattress designed to minimize localized stress concentrations caused by the weight of the body thereon within a bladder (14,16) impervious to gases or other fluids, completely encasing said mattress,  
varying the fluid pressure in the material as a means of controlling the resiliency

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of said material to a desired support level,  
wherein the support structure comprises a seat cushion and said seat cushion  
contains provisions for localized relief of stress comprising one or more tapered regions  
40 where material has been inherently removed selectively via apertures 24 from the  
seat cushion.

Claim 23, Culp discloses a method for reducing the possibility of development of  
deleterious body lesions in a human body under conditions of continued bed  
confinement by:

placing a mattress designed to minimize localized stress concentrations caused  
by the weight of the body thereon within a bladder (14,16) impervious to gases or other  
fluids, completely encasing said mattress,  
varying the fluid pressure in the material as a means of controlling the resiliency  
of said material to a desired support level,  
wherein the support structure comprises a seat cushion and said seat cushion  
contains provisions for localized relief of stress comprising one or more tapered regions  
40 where material has been inherently removed selectively via apertures 24 from the  
seat cushion.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 8, 10-11, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 3,798,686 to Gaiser.

Claim 1, Culp discloses a device comprising:

a foam mattress (10) cushion containing tapered portions defined by the conical structures 40 extending from the top and bottom surfaces of the mattress and the vacant conical structures inherently reduce the local stresses on the supported body since the mattress does not come into contact with the body;

a bladder (14,16) impervious to gases or other fluids, completely encasing said cushion;

a passageway 20 to allow and control the ingress and egress of a gas into the pores within the materials encased by the bladder. Culp fails to disclose a pressure pump to allow continuous variation of the fluid pressure within said bladder. Gaiser discloses a mattress having a pressure pump (col. 4 lines 52-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a pressure pump with the cushion of Culp as taught by Gaiser in order to adjust the

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support to individual needs.

Claim 2, wherein the encased material comprises a foam mattress in which portions of the support material have been removed or omitted in selected regions of the material (col. 3 lines 35-36), and the sides of the opening thus formed are such that they slope outward and downward from the center like a truncated cone (col. 3 lines 55-56) (Culp).

Claim 8, wherein said bladder is permanently sealed to prevent any escape of the fluid contained therein (col. 3 lines 5-8).

Claim 10, wherein the mattress contains provisions for localized relief of stress comprising one or more regions 24 where material has been removed or omitted selectively from said seat cushion (Culp).

Claim 11, where a variable orifice 20 is contained within the surrounding membrane to control the rate of gaseous exchange from within the membrane to outside of the membrane and vice versa (col. 3 lines 9-14).

Claim 24, Culp discloses all of the Applicant's claimed limitations except for a pressure pump to allow continuous variation of the fluid pressure within said bladder.

Gaiser discloses a mattress having a pressure pump (col. 4 lines 52-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a pressure pump with the cushion of Culp as taught by Gaiser in order to adjust the support to individual needs.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 5,343,579 to Dickerhoff et al.

Claim 25, Culp discloses all of the Applicant's claimed limitations except for a Ziploc fastening means. Dickerhoff discloses an enclosure having a Ziploc fastening means (col. 3 lines 10-17). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the Ziploc fastening means as taught by Dickerhoff in order to seal the enclosure.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 3,798,686 to Gaiser, and further in view of U.S. Pat. No. 5,022,111 to Fenner.

Claims 4-5, Culp, as modified, discloses all of the Applicant's claimed limitations except for the mattress formed from a convoluted foam material. Fenner discloses a mattress formed from a convoluted foam material 15 with smooth side upward. It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a convoluted foam material as taught by Fenner in order for the bottom to conform to the supporting bed frame structure and help distribute the pressure soars to reduce the tendency for upward forces to pass through to the individual.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 3,798,686 to Gaisec, and further in view of U.S. Pat. No. 3,846,857 to Weinstock.

Claims 6-7, Culp, as modified, discloses all of the Applicant's claimed limitations except for different types of foam material encased in individual membranes in selected regions. Weinstock discloses a mattress formed of different types of foam material encased in individual membranes in selected regions (10, 12, 13,14, 15). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the different foam material as taught by Weinstock in order to promote maximum comfort and to minimize the occurrence and severity of decubitus ulcers.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 3,798,686 to Gaiser, and further in view of U.S. Pat. No. 5,343,579 to Dickerhoff et al.

Claim 9, Culp, as modified, discloses all of the Applicant's claimed limitations except for a Ziploc fastening means. Dickerhoff discloses an enclosure having a Ziploc fastening means (col. 3 lines 10-17). It would have been obvious to one having ordinary skill in the art at the time of the invention to employ the Ziploc fastening means as taught by Dickerhoff in order to seal the enclosure.



Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,675,855 to Culp in view of U.S. Pat. No. 5,022,111 to Fenner.

Claim 21, Culp discloses a method for reducing the possibility of development of deleterious body lesions in a human body under conditions of continued bed confinement by;

placing a mattress 10 inherently designed to minimize localized stress concentrations caused by the weight of the body thereon within a bladder (14,16) impervious to gases or other fluids, completely encasing said mattress along weld points (18,26), varying the fluid pressure in the material as a means 20 of controlling the resiliency of said material to a desired support level. Culp fails to disclose the mattress formed from a convoluted foam material. Fenner discloses a mattress formed from a convoluted foam material 15 with smooth side upward. It would have been obvious to one having ordinary skill in the art at the time of the invention to employ a convoluted foam material as taught by Fenner in order for the bottom to conform to the supporting bed frame structure and help distribute the pressure soars to reduce the tendency for upward forces to pass through to the individual.

***Allowable Subject Matter***

Claims 3, 14-16, and 19 are allowed.

The prior art of record does not teach nor does any combination thereof fairly suggest a process for reducing the development of body lesions by removing, slicing, or cutting tapered portions or portions that are in the shape of an upright truncated cone from a mattress. The combination of elements as set forth in the claims is not shown by the prior art, and in particular the features as set forth above

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

Applicant's arguments filed 09/09/05 have been fully considered but they are not persuasive.

Contrary to the Applicant's arguments, Culp the vacant conical structures inherently reduce the local stresses on the supported body since the mattress does not come into contact with the body. Therefore, the vacant conical structures are configured to reduce stress since the body portion supported above the vacant structures does not come into contact with the mattress thereby reducing the local stresses placed on the body. Furthermore, the vacant regions are sealed along weld points of the air tight envelope (14,16). The impermeable envelope would inherently reduce the incidence of dust mites since they are not able to pass through an air impermeable materials, such as pvc and a polyurethane coating. The Applicant recites a support structure containing a plurality of tapered vacant regions. The conical structures 40 of Culp clearly define a tapered vacant region as broadly recited in the claims, and, as stated above, reduce the local stresses and the incidence of dust mites. The Applicant merely relies on broad structural language that fails to clearly define over the prior art and does not preclude the Examiner from interpreting the claim language as applied in the rejection.

With regards to claim 15, Applicant's are persuasive and therefore the art rejection with Culp is hereby withdrawn.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

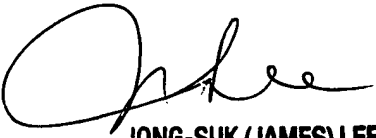
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDRICK C. CONLEY whose telephone number is 571-272-7040. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HEATHER SHACKELFORD can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FC



**JONG-SUK (JAMES) LEE**  
**PRIMARY EXAMINER**